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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,746	07/30/2003	Leonid Bravinski	92953-7	6812
22463	7590	06/07/2010		
SMART & BIGGAR 438 UNIVERSITY AVENUE SUITE 1500, BOX 111 TORONTO, ON M5G 2K8 CANADA			EXAMINER SAFAVI, MICHAEL	
			ART UNIT 3637	PAPER NUMBER
			MAIL DATE 06/07/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/629,746

Applicant(s)

BRAVINSKI, LEONID

Examiner

MICHAEL SAFAVI

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) 73 and 74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 2,6-8,12,13,15,16,25,29,34,35,69,72-83,91-94,104,105,107,114,115,122-126,128,131-136,143-145,147,158 and 159.

Continuation of Disposition of Claims: Claims rejected are 2,6-8,12,13,15,16,25,29,34,35,69,72, 75-83,91-94,104,105,107,114,115,122-126,128,131-136,143-145,147,158 and 159.

Election/Restrictions

Claims 73 and 74 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species of the invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 15, 2007.

The limitation of each of claims 73 and 74 appears directed to the non-elected embodiment of Fig. 1 with the "fourth portion" comprising a rod 118 between the "second portion" 114 and the upper surface of the panel member with the panel being compressed between the first portion 116/120 and the fourth portion 118. Claims 73 and 74 were inadvertently listed with claims indicated as allowable if placed in independent form. However, claims 73 and 74 should have been listed as withdrawn as being directed to a non-elected species of the invention.

Specification

The amendment filed December 11, 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Addition in paragraph [0078] of "Reinforcement units 222 are directly connected to and reinforce only the single panel member 212 and no other panel member of any other panel unit".

Applicant is required to cancel the new matter in the reply to this Office Action.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not provide antecedent basis for "depression", (claims 134 and 135), as is variously recited throughout the claim language.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 6-8, 12, 13, 15, 16, 25, 29, 34, 35, 69, 72, 75-83, 91-94, 104, 105, 107, 114, 115, 122-126, 144-145, 147, 158, and 159 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification had not originally presented **1)** "formwork system for retaining load from a construction material...during fabricating *a floor and/or roof structure*" particularly, "during fabricating *a floor and...roof structure*" or **2)** "formwork system for retaining load from a construction material...*without a temporary supporting member*" or **3)** "reinforcement unit having one or more components *comprising a unitary structure*" or **4)** "said reinforcement unit *being directly connected to said panel member*" or **5)** "said

Art Unit: 3637

reinforcement unit being...connected to said panel member of said form panel unit *and no other panel member of any other form panel units of said plurality of said form panel units*" or **6)** "said at least one reinforcement unit having at least one strengthening member *for only strengthening said panel member to which it is directly connected and no other panel member of any other panel unit of said plurality of panel units*", or **7)** "said at least one reinforcement unit remaining as part of *said floor and/or roof structure*" particularly, "remaining as part of *said floor and...roof structure*", or **8)** "said form panel unit...capable of supporting said construction material...*without any temporary supporting members*", (**claim 75**). The specification had not originally presented **1)** "said reinforcement unit *being directly connected to...said panel member*" or "said reinforcement unit...*reinforcing only said panel member...and no other form panel units of said plurality of said form panel units*" or **2)** "said at least one reinforcement unit also adapted for supporting said form panel unit *without any temporary support members*", (**claim 158**). The specification had not originally presented **1)** "said panel support member of said reinforcement unit strengthening *only said panel member in which said portion is embedded and none other of said panel units of said plurality of panel units*" or **2)** "said panel unit and said at least one reinforcement unit being capable of supporting said construction material...*without a temporary support member*", (**claim 91**). The specification had not originally presented **1)** "each reinforcement unit having a plurality of portions *comprising a unitary structure*", (**claim 144**). The specification had not originally presented **1)** "at least one panel reinforcement unit having at least one panel support member integrated with *only said panel member and no other panel*

members of any other panel units of said plurality of panel units" or 2) "said panel unit being capable of supporting said construction material above said panel member when in an unhardened state *without any temporary support members*", (**claim 159**).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 134-136 and 143 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 134 as at line 17 recites "said reinforcement unit further comprising..." when claim 134 had not set forth any element(s) that serves to make up the "said reinforcement unit". Therefore, it is not clear as to what "said reinforcement unit" comprises.

Applicant's arguments against the rejection of claims 75, 144, and 158 under 35 U.S.C. 112 have been reviewed. However, the passage alluded to by Applicant with respect to the reinforcement units 122, (i.e., paragraph [056] appears directed to a non-elected embodiment of the invention. Paragraph [078] of the specification does serve to provide support for "said reinforcement unit *being rigidly interconnected* to said panel member". It is not clear as to what Applicant's argument at the top of page 28 of the response is attempting to overcome particularly with paragraph [086] being directed to the non-elected embodiment of Fig. 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6-8, 12, 13, 15, 16, 25, 29, 34, 35, 69, 72, 75-83, 91-94, 104, 105, 107, 114, 115, 122-126, 128, 131-136, 143-145, 147, 158, and 159 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641.

As for **claims 91, 144, 25, and 29**, Caine discloses, Figs. 1 and 5, a panel (D/D/etc.), reinforcement unit (B/d), and structural supporting member, (rib), (A) upon which reinforcement unit (B/d) is placed to support panel (D/D). Longitudinally downwardly extending portion of panel D/D is along any longitudinal edge, (**claims 135 and 136**). The structural supporting member extends above the upper surface of the panel so that concrete can encase the supporting member, (**claim 72**). A plurality of reinforcements (B/d) are placed transversely above the panel with a portion, (upper surface thereof), above the upper surface of the panel with an extension portion resting on a surface of a transverse web of the support member (A), (**claims 2 and 6**). Support portion comprises connecting member (d) positioned within the panel and connector (E) having cap (portion around or beneath E) which serves as or has an exposed surface. Panel member (D/D) is held in compression between the upper member (B) and the

Art Unit: 3637

connector (E). Caine does not appear to specifically present a foam panel member within the assembly.

However, Carroll teaches application of polystyrene panels 13 within a composite floor assembly to provide for insulation therein. Carroll teaches utilization of a prepared form panel comprising the foam panel 13 and formboard 12, col. 4, lines 13-14 of Carroll. Therefore, to have provided the Caine floor assembly with polystyrene as the or part of the panels (D/D), (i.e., either provide a polystyrene panel with panel D of Caine so as to form a single form panel or replace panel D with a polystyrene panel), thus providing for insulation within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll.

Claims 134-136 and 143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641.

Caine discloses, Figs. 1 and 5, a form panel unit D/D/etc. comprising: a panel member D having an upper surface, a lower surface, opposed longitudinal side surfaces and opposed transverse front and rear side surfaces; said surfaces being configured for abutment with at least one other of said components of said formwork system; said panel member being adapted to be used as part of a form to retain said construction material in an unhardened state, said panel member having a longitudinally oriented depression in said upper surface, page 1, lines 104-105; at least one transversely oriented reinforcement unit B/d-G/g-E for reinforcing said panel member, member; said reinforcement unit further comprising a portion g extending from proximate said upper

Art Unit: 3637

surface of said panel member and passing through said lower surface of said panel member, (see Figs. 4 and 5), to provide support for and at said lower surface of said panel member; a structural supporting member 'A'; said panel support member, (any part of the reinforcement unit B/d-G/g-E), of said reinforcement unit having a portion for engagement with a structural supporting member oriented generally transverse to said support member and oriented generally transverse to the general orientation of said depression of said upper surface of said panel member; said panel unit being configured such that said form panel unit may be supported on at least one structural supporting member by said at least one panel support member, such that said unhardened construction material can be retained above said upper surface of said panel member and can be supported at least in part by said form panel unit; and wherein said surfaces of said panel member of said form panel unit are configured so as to be capable of mounting said form panel unit on said structural supporting member by vertical movement downwards of said form panel unit relative to said structural supporting member. Caine does not appear to specifically present a foam panel member within the assembly.

However, Carroll teaches application of polystyrene panels 13 within a composite floor assembly to provide for insulation therein. Carroll teaches utilization of a prepared form panel comprising the foam panel 13 and formboard 12, col. 4, lines 13-14 of Carroll. Therefore, to have provided the Caine floor assembly with polystyrene as the or part of the panels (D/D), (i.e., either provide a polystyrene panel with panel D of Caine so as to form a single form panel or replace panel D with a polystyrene panel), thus

providing for insulation within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll.

Claims 2, 6-8, 12, 13, 15, 16, 25, 29, 34, 35, 69, 72, 75-83, 91-94, 104, 105, 107, 114, 115, 122-126, 128, 131-133, 144-145, 147, 158, and 159 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald 2,844,024 in view of Carroll 3,965,641.

McDonald discloses, Fig. 2, panel member 22/22/etc., reinforcement unit 21/22q/22c having strengthening member 21c and structural supporting member, (rib), 20a, 20b. Support portion comprises connecting member 22q positioned within the panel and connector 22c having cap 22e which serves as or has an exposed surface. McDonald does not appear to specifically present a foam panel member within the assembly.

However, Carroll teaches application of polystyrene panels 13 within a composite floor assembly to provide for insulation therein. Carroll teaches utilization of a prepared form panel comprising the foam panel 13 and formboard 12, col. 4, lines 13-14 of Carroll. Therefore, to have provided the McDonald floor assembly with polystyrene as the or part of the panels 22/22, (i.e., either provide a polystyrene panel with panel 22 of McDonald so as to form a single form panel or replace panel 22 with a polystyrene panel), thus providing for insulation within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll.

Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641 as applied to claim 72 and further in view of either of Martin 1,864,025 and Lathrop 1,688,723.

Each of Martin and Lathrop teaches application of channel beam support members 1 within a composite floor assembly. Therefore, to have provided the modified Caine floor assembly with channel beams as the support members in place of the members (A), thus utilizing an alternate support member within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Martin and Lathrop. Providing openings along an upper web portion of the resulting channel supporting member to allow for attachment to the tie or extension means, (including d'), of Caine, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Lathrop as in Figs. 1 and 5.

Claims 15, 34, 35, 123-125; 82, 83; 132, and 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641 as applied to claims 16, 76, 80, 91, 128, and 144 and further in view of Lin 5,612,111.

Lin discloses utilization of a foam roof panel component 3 having the upper and lower surfaces laminated with a polypropylene skin 1, 2. Therefore, to have provided the modified Caine floor assembly polystyrene panels with the upper and lower surfaces laminated with a polypropylene skin, thus providing for a durable covering for the

structural foam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Lin.

Claims 15, 34, 35, 123-125; 82, 83; 132, and 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald 2,844,024 in view of Carroll 3,965,641 as applied to claims 16, 76, 80, 91, 128, and 144 and further in view of Lin 5,612,111.

Lin discloses utilization of a foam roof panel component 3 having the upper and lower surfaces laminated with a polypropylene skin 1, 2. Therefore, to have provided the modified McDonald floor assembly polystyrene panels with the upper and lower surfaces laminated with a polypropylene skin, thus providing for a durable covering for the structural foam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Lin.

Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view Carroll 3,965,641 as applied to claim 72 and further in view of either of Staresina et al. 4,930,278 and Bodnar 5,809,724.

Each of Staresina et al. and Bodnar teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the modified Caine floor assembly with support beams having apertures within the web or flange portions thereof, thus allowing for bonding between the concrete and each respective beam, would have been obvious to one

having ordinary skill in the art at the time the invention was made as taught by either of Staesina et al. and Bodnar.

Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641 and either of Martin 1,864,025 and Lathrop 1,688,723 as applied to claim 69 above, and further in view of Staesina et al. 4,930,278 and Bodnar 5,809,724.

Though, the examiner feels that "a plurality of spaced apertures" is taught by at least Lathrop as expressed above, each of Staesina et al. and Bodnar teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the modified Caine floor assembly with support beams having apertures within the web or flange portions thereof, thus allowing for bonding between the concrete and each respective beam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Staesina et al. and Bodnar.

Claim 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald 2,844,024 in view of Carroll 3,965,641 as applied to claim 92 and further in view of either of Staesina et al. 4,930,278 and Bodnar 5,809,724.

Each of Staesina et al. and Bodnar teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the McDonald floor assembly with support beams having

Art Unit: 3637

apertures within the web or flange portions thereof, thus allowing for bonding between the concrete and each respective beam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Staesina et al. and Bodnar.

Claim 126 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caine 809,090 in view of Carroll 3,965,641 and Lin 5,612,111 as applied to claim 124 and further in view of either of St. Clair 4,223,487 and Stern et al. 4,227,356.

Each of St. Clair and Stern et al. teach application of a polyethylene layer along at least one surface of a foam plastic panel, 24 on 22 of St. Clair and 12 on 17 of Stern et al. Therefore, to have provided the modified Caine floor assembly polystyrene panels with the upper and lower surfaces laminated with a polypropylene skin, thus providing for a durable covering for the structural foam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of St. Clair and Stern et al.

Response to Arguments

Applicant's arguments filed December 11, 2009 have been fully considered but they are not persuasive. Applicant's arguments with respect to each of Cain and McDonald as modified as found on pages 30 and 32 of the response appear directed to a process of use or desired use. The language of the rejected claims does not preclude "temporary supports" since the claims are directed to an article of manufacture or

"product" which product can and may be utilized in whatever fashion. In any event, the term to "temporary support" does not by itself serve to define over the applied prior art since the term "temporary support" does not define a specific element. The language of claims 75, 91, 144, 158 and 159 does not preclude the presence of extra components.

As for McDonald, slabs 22 as illustrated in Figs. 1 and 2 read upon "panel member" particularly, with the McDonald panel assembly of Figs. 1 and 2 being made as one "panel member" by virtue of connection with the reinforcement unit 21 forming a single "unit" or "member". Thus, McDonald reads on "panel member" or "panel unit" or "panel unit comprising a panel member". Likewise, slabs 'D' as illustrated in Fig. 4 of Caine read upon "panel member" particularly, with the Caine panel assembly of Figs. 4 and 5 being made as one "panel member" by virtue of connection with the reinforcement unit (B/d) forming a single "unit" or "member". Thus, Caine reads on "panel member" or "panel unit" or "panel unit comprising a panel member".

Further, Applicant's arguments as to compression appear directed to intended assembly at least, with regard to those claims that do not positively recite any compression between components of the form system. In any event, in order to maintain the panel elements 22 of McDonald or 'D' of Caine in position the respective panel elements of McDonald and Caine would be held in a compressed state since force would have to be applied from above and below (in Caine) and from above and within (in McDonald). Thus, each of Caine as modified and McDonald as modified read upon the claim 128 language to "said reinforcement unit comprises at least one connecting member that extends from proximate said upper surface of said panel

member toward said lower surface of said panel member and engages said reinforcing portion of said reinforcement unit...said panel member is compressed between said connecting member and said upper compression member.

As for Applicant's arguments with respect to claim 134, Caine does disclose the limitations of claim 134 as set forth in the above rejection of claim 134.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHAEL SAFAVI** whose telephone number is (571)272-7046. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darnell Jayne can be reached on (571) 272-7723. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Safavi/
Primary Examiner, Art Unit 3637

M. Safavi
April 22, 2010